New Combinations in Stigmatodactylus (Orchidaceae)

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ABSTRACT. Recent anatomical and morphological studies of the Acianthinae indicate that the four species of *Acianthus* from Papuasia are better placed within *Stigmatodactylus*. This transfer requires three new combinations.

Stigmatodactylus Maxim. ex Makino is a small genus of ground orchids that was established in Makino's (1891) Illustrations of the Flora of Japan. As currently delimited, it contains approximately seven species and is found in Japan, northern India, Java, Borneo, the Celebes, the Moluccas, New Guinea, and the Solomon Islands (Bougainville and Guadalcanal). The genus is closely allied to Acianthus R. Br. and Townsonia Cheesm., but is readily distinguished from these genera by its massive, subentire or 3-lobed basal callus on the labellum, ventrally keeled or appendaged column, and prominent dactyliform appendage on the posterior margin of the stigma. In addition, Stigmatodactylus has axillary subterranean tubers (as opposed to terminal ones in Acianthus); the plants are unifoliate (as opposed to multifoliate in Townsonia); and the cells that line the anther have type IV endothecial thickenings (Freudenstein, 1991) (as opposed to type I or type IIIc thickenings in Acianthus or type I thickenings in Townsonia).

After examining these genera in detail, I have concluded that the three species I previously de-

scribed from Papuasia (Kores, 1991) are incorrectly placed within Acianthus and should be transferred to Stigmatodactylus. New combinations are here proposed for the three species not previously transferred to Stigmatodactylus. It should also be noted that with the exclusion of the Papuasian taxa from Acianthus, the geographic distribution of the genus is restricted to New Caledonia, New Zealand, and Australia.

Stigmatodactylus gibbsae (Kores) Kores, comb. nov. Basionym: *Acianthus gibbsae* Kores in Lindleyana, 6: 166, f. 2. 1991.

Stigmatodactylus croftianus (Kores) Kores, comb. nov. Basionym: *Acianthus croftianus* Kores in Lindleyana, 6: 168, f. 3. 1991.

Stigmatodactylus variegatus (Kores) Kores, comb. nov. Basionym: *Acianthus variegatus* Kores in Lindleyana, 6: 171, f. 4. 1991.

Literature Cited

Freudenstein, J. V. 1991. A systematic study of endothecial thickenings in the Orchidaceae. Amer. J. Bot. 78: 766-781.

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